| Index of C | laims |
|------------|-------|
|            |       |

| Application No. | Applicant(s)      |  |
|-----------------|-------------------|--|
| 09/896,888      | GRIGLIATTI ET AL. |  |
| Examiner        | Art Unit          |  |
| Nancy T. Vogel  | .1636             |  |

| √ | Rejected |
|---|----------|
| = | Allowed  |

| _ | (Through numeral)<br>Cancelled |
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| ÷ | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| ı | Interference |

| Α | Appeal   |
|---|----------|
| 0 | Objected |

Date

| Cla       | aim               | Date            |         |                    |               |          |           |           | [   | Claim |          | Date                               |                 |                 |          |   |          | CI         | aim        |          |  |
|-----------|-------------------|-----------------|---------|--------------------|---------------|----------|-----------|-----------|-----|-------|----------|------------------------------------|-----------------|-----------------|----------|---|----------|------------|------------|----------|--|
| Final     | Original          | 4)1604          |         |                    |               |          |           |           |     | Final | Original |                                    |                 |                 |          |   |          | Final      | Original   |          |  |
|           | 1                 | 1               |         |                    |               |          |           |           |     |       | 51       |                                    |                 |                 |          |   |          |            | 101        |          |  |
|           | 2                 | 0               |         |                    |               |          |           |           |     |       | 52       |                                    |                 |                 |          |   | ]        |            | 102        |          |  |
|           | 3                 | 0               |         |                    |               |          | Ш         |           |     |       | 53       |                                    |                 |                 |          |   |          |            | 103        |          |  |
|           | 4                 | 1               |         |                    | _             | ·        |           |           |     |       | 54       |                                    |                 | $\perp$         |          |   |          |            | 104        | $\perp$  |  |
|           | 5                 | Ш               |         | $\perp \downarrow$ |               |          |           |           |     |       | 55       | $\perp$                            |                 |                 |          |   |          |            | 105        |          |  |
|           | 6                 | Ш               |         |                    |               |          |           | _ :       |     |       | 56       | $\perp$                            |                 |                 |          | Щ.  | _        |            | 106        |          |  |
|           | 7                 | Ш               | _       | $\perp \perp$      |               |          | $\perp$   |           | -   |       | 57       |                                    |                 |                 |          |   |          |            | 107        | _        |  |
|           | 8                 | Ш               | _       | $\perp$            |               | _        | $\perp$   | _         | ŀ   |       | 58       |                                    |                 |                 |          |   | 100      |            | 108        | _        |  |
|           | 9                 | $  \perp \mid $ |         |                    |               |          |           |           | -   |       | 59       | $-\!\!\!\!-\!\!\!\!\!-\!\!\!\!\!-$ |                 | $\perp$         | $\dashv$ | -   | 4        |            | 109        | $\dashv$ |  |
|           | 10                | $\square$       | -       | +                  |               | -        | 1-1       |           |     |       | 60       |                                    |                 |                 |          |   | -        |            | 110        | _        |  |
|           | 11                | H               |         | +                  | -             | +        | +         | _         | -   |       | 61       |                                    | $\vdash \vdash$ | +               |          |   | -        |            | 111        | -        |  |
|           | 12                | H               | -       | +                  | $\dashv$      | +        | +         | - 3       | -   |       | 62       |                                    |                 |                 |          |   | -        |            | 112        | -        |  |
|           | 13<br>14          | H               |         | ++                 | $\dashv$      |          | ++        |           | -   |       | 63<br>64 |                                    | $\vdash \vdash$ | +               |          | $\vdash \vdash$                                   | -        |            | 113<br>114 | $\dashv$ |  |
|           | 15                | Н               | +       | +                  | $\dashv$      | -        | +         | :         | -   |       | 65       |                                    |                 | +               |          | $\vdash$  | -        |            | 115        | $\dashv$ |  |
|           | 16                | +               |         | +                  | -+            |          | ╁┤        | -1        | -   |       | 66       |                                    | $\vdash$        | +               |          |   | -        |            | 116        | $\dashv$ |  |
|           | 17                | 1               |         | 1                  | $\dashv$      | +-       | +         | -1        | 1   |       | 67       | $\dashv$                           | $\vdash$        | +               | +        | $\vdash$  | -        |            | 117        | $\dashv$ |  |
|           | 18                | 1               | _       | +                  | $\dashv$      | +        | +         | -8        |     |       | 68       | $\dashv$                           |                 | +               |          | $\vdash$  | <b>-</b> |            | 118        | +        |  |
|           | 19                | •               |         | +                  | $\dashv$      |          | 1         |           | ŀ   |       | 69       |                                    | $\vdash$        | +               | +        | $\vdash$  | 1        |            | 119        | $\dashv$ |  |
|           | 20                |                 | +       | $\Box$             |               |          | 1         |           | ł   |       | 70       |                                    | -               | +               | _        | -   | -        |            | 120        | $\dashv$ |  |
|           | 24~               | П               |         | T                  | 1             |          | +         |           | t   |       | 71       |                                    | $\vdash$        | $\top$          | $\top$   | $\vdash$  |          | ********** | 121        | $\dashv$ |  |
|           | 22-               | H               |         | 11                 | 寸             | 1        | $\top$    |           | ŀ   |       | 72       |                                    |                 | +               | $\top$   | <del>                                     </del>  |          |            | 122        | 十        |  |
|           | 23                |                 |         |                    |               |          | $\dagger$ | $\exists$ | ŀ   |       | 73       |                                    |                 | 1               |          | $\vdash$  | 7        |            | 123        | _        |  |
|           | -24               |                 |         | П                  |               |          |           |           | ŀ   |       | 74       |                                    |                 | 11              |          | H   | 1        |            | 124        | $\dashv$ |  |
|           | 25                |                 |         |                    |               |          | 1         |           | ı   |       | 75       |                                    |                 | 11              |          |   |          |            | 125        | 寸        |  |
|           | · <del>26</del> - |                 |         |                    |               |          |           |           | Ī   |       | 76       |                                    |                 | $\top$          |          |   |          |            | 126        | T        |  |
|           | 27                | V               |         |                    | T             |          |           | -         | Ī   |       | 77       |                                    |                 | $\top$          |          |   | 7        |            | 127        | $\neg$   |  |
|           | 28                | V               |         |                    | 1             |          |           | -         | . [ |       | 78       |                                    |                 | 1               |          |   |          |            | 128        |          |  |
|           | 29                | U               |         |                    |               |          |           |           |     |       | 79       |                                    |                 |                 |          |   |          |            | 129        |          |  |
|           | 30                |                 |         |                    |               |          |           |           |     |       | 80       |                                    |                 |                 |          |   |          |            | 130        |          |  |
|           | 31                |                 |         | $\perp$            |               |          |           |           |     |       | 81       |                                    |                 |                 |          |   |          |            | 131        |          |  |
|           | 32                |                 |         | $\perp \perp$      |               |          |           |           |     |       | 82       |                                    |                 |                 |          |   |          |            | 132        |          |  |
|           | 33                |                 |         |                    |               |          | $\perp$   | - 0       |     |       | 83       |                                    |                 |                 |          |   |          |            | 133        | _        |  |
|           | 34                |                 |         |                    | _             |          | 11        | _         | L   |       | 84       |                                    |                 | 1               |          | $oxed{oxed}$                                      |          |            | 134        | _        |  |
|           | 35                |                 | $\perp$ | $\sqcup$           |               |          | $\perp$   |           | L   |       | 85       |                                    |                 | $\perp$         |          |   |          |            | 135        | _        |  |
|           | 36                |                 | _       | +                  | _             |          | 1         |           | L   |       | 86       |                                    |                 |                 | _        |   | 4 1      |            | 136        | _        |  |
| -         | 37                |                 |         | 1-1                | -             |          | $\perp$   |           | -   |       | 87       | $\dashv$                           |                 | +               |          |   | -        |            | 137        |          |  |
|           | 38                |                 | +       | $\vdash$           | -             |          |           |           | 1   |       | 88       |                                    |                 | +               | _        | <b></b>   | -        |            | 138        | $\dashv$ |  |
|           | 39                |                 |         | -                  |               |          | ++        |           | -   |       | 89       | -                                  | -               | +               |          | <b>├</b> ├  | -1111    |            | 139        |          |  |
|           | 40                | $\vdash$        | +       | +                  | $\rightarrow$ | -        | +         | -         | -   |       | 90       |                                    |                 |                 |          |   | -        |            | 140        | +        |  |
|           | 41                |                 |         | +                  |               |          | ++        |           | }   |       | 91<br>92 | -                                  | $\vdash$        | +               |          |   | -        |            | 141        | +        |  |
|           | 42                | $\dashv$        | -       | +                  | -             | -        | +         | - 1::     | ŀ   |       | 93       |                                    | -               | +               |          | $\vdash$  |          |            | 142        | +        |  |
| $\dashv$  | 44                | $\dashv$        | +       | ++                 | -+            | $\dashv$ | +         | -         | }   |       | 94       | $\dashv$                           | $\vdash$        | +               |          | $\vdash$  |          |            | 144        | +        |  |
|           | 45                | -               |         | +                  | $\dashv$      | +        | +         | -1:       | -   |       | 95       |                                    | -               | +               | +        | <del></del>                                       | -        |            | 145        | $\dashv$ |  |
|           | 46                | $\vdash$        | +       | +-+                | +             | +        | +         |           | ŀ   |       | 96       | +                                  | +               | ++              |          | <del>                                      </del> |          |            | 146        |          |  |
|           | 47                | -               |         | +-+                | $\dashv$      | -        | 1         | $\dashv$  | ŀ   |       | 97       | $\dashv$                           | -               | + 1             |          |   |          |            | 147        | $\dashv$ |  |
| $\exists$ | 48                | $\exists$       |         | +                  |               | $\top$   | +         | $\dashv$  | ŀ   |       | 98       | +                                  | -               | $\dashv \dashv$ |          |   |          |            | 148        | -+       |  |
|           | 49                |                 | _       | 1                  | $\dashv$      | +        |           | - 1       | T   |       | 99       | $\dashv \dashv$                    |                 | + 1             | 1        |   |          |            | 149        | $\dashv$ |  |
|           | 50                |                 | 1       | 1 1                | -+            | +        | 1 1       | - 1       | 1   |       | 100      | ++                                 |                 | +-              |          | <del>                                     </del>  | <b>⊣</b> |            | 150        | -+       |  |

| CIC           | uiii              |                     | _              |                | Pau                                |               |  | _ :::  |          | SIH I I  |  | Date          |                          | -        |              | aiiii    |          |                |                 | Jace      |           |               |               | _        |
|---------------|-------------------|---------------------|----------------|----------------|------------------------------------|---------------|--|--------|----------|----------|--|---------------|--------------------------|----------|--------------|----------|----------|----------------|-----------------|-----------|-----------|---------------|---------------|----------|
| Final         | Original          | ₹<br>3<br>7         |                |                |                                    |               |  |        | Final    | Original |  |               |                          |          | Final        | Original |          |                |                 |           |           |               |               |          |
|               | 1                 | 11                  |                |                | $\top$                             |               |  |        |          | 51       |  |               |                          |          | _            | 101      |          | †              |                 |           | _         | $\neg$        | _             |          |
| $\neg$        | 2                 | 0                   |                |                | +                                  |               | 1  |        |          | 52       |  | 11            | <del>       </del>       | -        | <del> </del> | 102      |          | 1              |                 | -         | 1         | $\dashv$      | $\dashv$      | _        |
|               | 3                 | 0                   | -              |                | +                                  | -             | 1  | -      | -        | 53       |  |               |                          | -        | -            | 103      | +        | +-             | Н               | $\dashv$  | _         | $\dashv$      | $\dashv$      | _        |
| $\dashv$      | 4                 |                     | <del>-</del>   | $\vdash$       | +                                  | +             | + +  | -      | -        | 54       |  | +             |                          | -        |              | 103      |          | +              | $\vdash$        | $\dashv$  |           |               | -             | _        |
| $\dashv$      |                   | 1                   | 1              | $\vdash$       | +                                  | -             | +  | -      | -        | 54       |  | $\dashv$      |                          | -        |              | 104      | -        | 1              | $\vdash$        | $\dashv$  |           | $\dashv$      | $\dashv$      | -        |
| $\dashv$      | 5                 | $\vdash \downarrow$ | <del> </del> — | $\vdash\vdash$ | +                                  |               |  | - 111  |          | 55       |  | ++            |                          | 4        | <u></u>      | 105      |          | ├              |                 |           |           |               | -             | _        |
| _             | 6                 | Ш                   | _              | $oxed{oxed}$   | $\perp$                            |               | $\bot$ $\bot$                                    | 4      |          | 56       |  | $\perp$       |                          | _        |              | 106      |          | ļ              |                 |           |           |               | _             | _        |
| _             | 7                 | Ц                   |                |                | $\perp$                            |               | $\bot \bot$                                      | 4      |          | 57       |  |               |                          |          | ļ            | 107      |          |                | Ш               | _         |           | _             | _             |          |
|               | 8                 | Ц                   |                |                |                                    |               |  | _      |          | 58       |  |               |                          | 1.0      |              | 108      |          | L              |                 |           |           | $\perp$       | _             |          |
|               | 9                 | $\perp$             |                |                |                                    |               |  | 10     |          | 59       |  |               |                          |          |              | 109      |          |                |                 |           |           |               |               |          |
| ĺ             | 10                |                     |                |                |                                    |               |  |        |          | 60       |  |               |                          |          |              | 110      |          |                |                 |           |           |               |               |          |
|               | 11                | П                   |                |                |                                    |               | T  |        |          | 61       |  |               |                          |          |              | 111      |          |                |                 |           |           | $\Box$        | コ             |          |
|               | 12                |                     |                |                |                                    |               |  |        |          | 62       |  |               |                          | 7        |              | 112      |          |                |                 |           |           | 寸             | ヿ             | $\neg$   |
|               | 13                | T                   |                |                | $\Box$                             |               |  |        |          | 63       |  |               |                          |          |              | 113      |          | 1              |                 |           | 一         | 一             | $\dashv$      | $\dashv$ |
|               | 14                | 1                   |                |                | 1                                  |               | 11   |        |          | 64       |  |               |                          | -        |              | 114      |          | 1              |                 |           | $\neg$    | -+            | $\neg$        | $\neg$   |
|               | 15                | H                   |                |                | 1 1                                |               | + +  | -      | -        | 65       | <del>   -</del>                                  | +             | +++                      |          |              | 115      |          | +              | $\vdash$        | $\exists$ | $\dashv$  |               | -             | $\dashv$ |
|               | 16                | +                   |                |                | +                                  |               |  | -      | -        | 66       |  | ++            |                          | -        | -            | 116      | -        | <del> </del> - |                 |           | $\dashv$  | $\dashv$      | $\dashv$      | $\dashv$ |
| $\dashv$      |                   |                     |                | $\vdash$       | +                                  | -             | +  | -      |          |          | +++  | +             | +++                      | -        |              | 110      |          | +              | H               |           |           |               | -+            |          |
|               | 17                |                     | _              | $\vdash$       | +                                  | +             | ++   | -      | -        | 67       | <del></del>                                      |               | +++                      | -        | <u> </u>     | 117      |          | ┼              | $\vdash \vdash$ |           | $\dashv$  |               |               | _        |
| $\rightarrow$ | 18                | 1                   |                | -              | +                                  |               | <del> </del>                                     | -      | <b> </b> | 68       |  | ++            | +++                      | -        | ļ            | 118      | _        | -              | -               |           | -         | $\rightarrow$ | $\dashv$      | -        |
| _             | 19-               |                     | _              |                |                                    |               |  | _ 38   | <u></u>  | 69       |  | $\perp$       |                          |          | <u></u>      | 119      |          |                |                 |           | _         | _             | _             | _        |
|               | 20                |                     |                |                |                                    | $\perp$       | <u> </u>   |        |          | 70       |  | $\perp$       |                          |          |              | 120      |          | <u> </u>       |                 |           |           |               |               |          |
|               | 24~               |                     |                |                |                                    |               |  |        |          | 71       |  |               |                          |          |              | 121      |          |                |                 |           |           |               |               |          |
|               | 22-               |                     |                |                |                                    | I             |  |        |          | 72       |  |               |                          |          |              | 122      |          |                |                 |           |           |               | $\neg$        |          |
| $\neg \tau$   | 23                |                     | _              |                |                                    |               | t l  | 7      |          | 73       |  |               |                          |          |              | 123      |          |                |                 |           |           |               | $\neg$        |          |
|               | -24               |                     |                |                |                                    |               | 1 1  | 7      |          | 74       |  |               |                          | 7        |              | 124      | .        | 1              |                 |           |           | -             | $\neg$        |          |
|               | 25                |                     |                |                | 1 1                                |               | 1  |        |          | 75       |  |               |                          | 100      |              | 125      |          | 1              |                 |           | _         | 十             | 十             | _        |
| $\dashv$      | · <del>26</del> - |                     | -              |                | †**†                               | +-            | ++-  | -      | -        | 76       |  | +             | <del></del>              | -        |              | 126      |          | $t^-$          |                 | -         |           |               | $\dashv$      |          |
|               | 27                | V                   | <del>-</del>   |                | +                                  | -             | ++   | -      |          | 77       |  | +             |                          | -        |              | 127      |          | ┼─             | $\vdash$        | $\dashv$  | $\dashv$  | -             | +             | -        |
| $\dashv$      | 28                | 1                   | -              |                | +                                  |               | + +  | -      |          | 78       |  |               | +++                      | -        |              |          |          | ┼              | ┝               | $\dashv$  | $\dashv$  | $\dashv$      |               |          |
| $\dashv$      |                   | -                   | _              |                | +-+                                |               | <del>  </del>                                    | 4::    |          | 70       | $\vdash$   |               |                          | -        |              | 128      |          | -              |                 | $\dashv$  | -         | $\dashv$      | +             |          |
|               | 29                | $\boldsymbol{\nu}$  |                |                | $\perp$                            |               | <b></b> -  | -      |          | 79       |  | ++            | <del>-   -   -  </del> - | -        | <u> </u>     | 129      |          | <b>├</b>       |                 |           |           | $\dashv$      | _             |          |
| _             | 30                |                     | ļ              |                | -                                  |               |  | 4      |          | 80       |  |               | $\bot$                   | _        |              | 130      |          | 1              | L_              | _         | _         | _             | 4             | _        |
|               | 31                |                     |                |                | $\downarrow \downarrow \downarrow$ |               | 1_1_   |        |          | 81       |  |               |                          |          | <u> </u>     | 131      |          |                |                 |           |           | _             | _             | _        |
|               | 32                |                     |                |                |                                    |               | L.l.   |        |          | 82       |  |               |                          |          |              | 132      |          |                |                 |           |           |               |               |          |
|               | 33                |                     |                |                |                                    |               |  |        |          | 83       |  |               |                          | 5        | 1            | 133      |          |                |                 |           |           |               |               |          |
|               | 34                |                     |                |                |                                    |               |  |        |          | 84       |  |               |                          |          |              | 134      |          |                |                 |           |           |               | $\Box$        | $\neg$   |
|               | 35                |                     |                |                |                                    |               |  | 7::::  |          | 85       |  |               |                          |          |              | 135      |          |                |                 |           |           |               | П             | $\neg$   |
|               | 36                |                     |                |                |                                    |               |  | 7      |          | 86       |  | 1 1           |                          |          |              | 136      |          |                |                 |           |           | ヿ             |               |          |
|               | 37                |                     |                |                |                                    |               | 1  | 7      |          | 87       |  |               |                          |          |              | 137      |          |                |                 | 一         |           | 十             | ヿ             | ヿ        |
| 寸             | 38                |                     |                |                | +                                  |               |  | 7:::   |          | 88       |  | $\pm$         |                          |          |              | 138      |          |                |                 |           |           | 十             | $\dashv$      | $\neg$   |
| $\dashv$      | 39                |                     |                |                | +                                  |               | <del>                                     </del> | -      |          | 89       |  | 1 1           | <del>       </del>       | -        |              | 139      | +        |                |                 | $\dashv$  | $\dashv$  | -+            | +             | $\dashv$ |
| $\dashv$      | 40                |                     | -              | -              | +                                  |               | ++   | -      | -        | 90       |  | +-+           | ·· <del>··   -</del>     | -        |              | 140      |          | -              |                 | $\dashv$  | +         | $\dashv$      | +             | $\dashv$ |
|               |                   |                     |                |                | +                                  |               | +  | - :::: |          |          |  | +-+           |                          | -        | ļ            |          |          | 1              |                 | -         | -         | +             | -             | $\dashv$ |
|               | 41                |                     |                |                | 1-1                                |               | <del>  -</del>                                   | -      |          | 91       | <del>                                     </del> | <del></del>   |                          | -        |              | 141      |          | 1              | $\vdash$        | -         | _         | +             | $\rightarrow$ |          |
|               | 42                |                     |                | -              | $\perp$                            | -             | $\vdash$   | -      | <u> </u> | 92       |  |               |                          |          |              | 142      |          | _              | $\vdash$        | _         | _         | $\dashv$      | $\dashv$      | _        |
| _             | 43                |                     | Ш              | oxdot          | $\perp \perp$                      | _ _           | <del>                                     </del> | 4:::   | <b></b>  | 93       |  | $\bot \bot$   |                          |          | $\vdash$     | 143      | $\perp$  | <b>↓</b> _     | $\sqcup$        | _         | _         | $\dashv$      | $\dashv$      | _        |
|               | 44                |                     |                |                | $\sqcup$                           |               | $\perp \perp$                                    |        |          | 94       |  |               | $\perp \perp \perp$      |          | L            | 144      |          | _              | L.              |           |           | $\perp$       |               |          |
|               | 45                |                     |                |                |                                    |               |  |        |          | 95       |  | $\perp \perp$ |                          |          |              | 145      |          |                |                 |           |           | $\perp$       |               |          |
|               | 46                |                     |                |                | $\perp$ $\Box$                     |               | $\bot$ $\top$                                    |        | L        | 96       |  |               |                          |          |              | 146      |          |                |                 | T         | T         | T             | T             |          |
|               | 47                |                     |                |                | 1.                                 |               |  | 7      |          | 97       |  |               | 7 7 7                    | 7        |              | 147      | $\top$   |                | П               |           | $\exists$ | 丁             | $\top$        | コ        |
|               | 48                |                     |                |                | T                                  | $\neg \vdash$ |  | 7      |          | 98       |  | $\top \top$   |                          | 7        |              | 148      |          | П              |                 |           |           | $\neg$        | $\dashv$      | ヿ        |
| $\dashv$      | 49                |                     |                |                | +                                  |               |  | 1:::   |          | 99       | <del>                                     </del> | ++            |                          | 1        |              | 149      | $\dashv$ | $\vdash$       | $\vdash$        |           | $\dashv$  | +             | -+            | $\dashv$ |
|               | 50                |                     |                | -              | +-+                                | +             | +  | 1:::   |          | 100      | <del>                                     </del> | +-            |                          | $\dashv$ |              | 150      |          | +-             |                 |           | +         | +             | $\dashv$      | $\dashv$ |
|               | <u> </u>          |                     |                |                |                                    |               |  |        | L        | LIUU     | L  |               |                          |          |              | 100      |          | 1              |                 | 1         |           |               |               |          |